

# Exhibit 17

R. J. Kerstetter

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CYPRUS ORE RESERVES - ARSENIC & TREMOLITE

*Excerpts from Cyprus Talc Reserve Report by R.C. Munro*

Geology & Environment

There are some important environmental issues related to the geology and mineralogy of the Cyprus talc deposits, particularly in Vermont.

Arsenic

Arsenic iron sulphides (arsenopyrite) are, with their alteration products, present in many of the talc-carbonate schist ore zones in the Vermont area. Total arsenic, as analyzed in the Ludlow Rainbow deposit, averages generally less than 100 ppm but with some small zones in excess of 1000 ppm. No apparent major effort is underway to regularly monitor or completely assess the total arsenic content of ores, tailing solids and wastes although the distribution of sulphides and arsenates in the talc ore system is generally understood.

In near surface weathering zones, crushed rock, stock piles and mine working areas, the arsenic sulphides (above) convert in part to the more soluble arsenates, for example, the hydrous nickel arsenate, annabergite (38%  $As_2O_5$ ). Soluble arsenic is measured in cores, ore samples, mill feed, product and tailings. Soluble arsenic content is monitored and governed under EPA/OSHA regulations.

High (e.g. + 6 ppm As) soluble arsenic contents of mill feed at the West Windsor mill contribute to reduced recoveries and milling rates. At West Windsor, part of the mill recovery problem at least is being ascribed to a high fines content in the feed and to low pH of the process water, both of which contribute to increased soluble As. The problem has been under study at West Windsor since 1987 by Mill Manager, Jeff Scott, who indicated that if the arsenic content is above + 6 ppm soluble As and the talc content falls below 62% talc production rates and recoveries can fall by 50%. The product specs are -3 ppm As or less at West Windsor and current material in the silos is measured at 0.73 ppm to 2.33 ppm soluble As.



for burial, have been measured at 0.33% to 0.70% tremolite by Three Forks and Alpine Mill Labs.

No fibrous material showed up in samples taken by the writer at the Western Source Red Hill mine in California, but minor tremolite is possibly present in the contact zone where it should be avoidable by selective mining.

Arsenic content (total and soluble) and the presence of fibrous minerals in exposed stockpiles and waste need to be checked at Alpine, Alabama and the now closed California properties operated by Cyprus in the past.

  
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/ejj

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